

IN THE DRAWINGS:

The attached sheet of drawing includes changes to FIG. 1. This sheet of drawing replaces the original sheet of drawing including FIG. 1. FIG.1 is amended to show the thermal elements, the resist mechanism and the alignment markers.

REMARKS

Reconsideration and allowance of the present patent application based on the following remarks are respectfully requested.

By this Amendment, the specification and claims 1, 4, 6, 8, 10, 13 and 15 are amended without any intention of narrowing the scope of any of the claims. Claim 9 is withdrawn from further consideration. Accordingly, after entry of this Amendment, claims 1-15 will remain pending in the patent application.

In the Office Action, the drawings were objected to under 37 CFR 1.83(a). In connection with the objection, the Examiner indicates that the “thermal elements”, the “resist mechanism” and the “alignment markers” of the claims are not shown in the drawings. Without responding to the merits or substance of this rejection, Applicant has amended FIG. 1 to show these elements. A replacement sheet showing the changes to FIG. 1 is enclosed herewith. The specification has been amended accordingly. No new matter has been added.

Accordingly, reconsideration and withdrawal of the objection to the drawings are respectfully requested.

Claim 10 was objected to for an informality noted in the Office Action. In response, claim 10 has been amended in the manner suggested by the Examiner. Accordingly, reconsideration and withdrawal of the objection to claim 10 are respectfully requested.

Claims 4, 6-8 and 10-13 were rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the enablement requirement. This rejection is respectfully traversed.

The MPEP provides some guidance on the enablement requirement. Specifically, MPEP § 2164.04 states: “In order to make a rejection, the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention.” MPEP § 2164.01(a) states: “There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is ‘undue.’ These factors include, but are not limited to: (A) The breadth of the claims; (B) The nature of the invention; (C) The state of the prior art; (D) The level of one of ordinary skill; (E) The level of predictability in the art; (F) The amount of direction provided by the inventor; (G)

The existence of working examples; and (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.”

MPEP § 2164.01(a) also states: “It is improper to conclude that a disclosure is not enabling based on an analysis of only one of the above factors while ignoring one or more of the others. The examiner's analysis must consider all the evidence related to each of these factors, and any conclusion of nonenablement must be based on the evidence as a whole.”

MPEP § 2164.01 further points out : “A patent need not teach, and preferably omits, what is well known in the art.”

It is respectfully submitted that the Examiner has not met his initial burden to establish a reasonable basis on which to question the enablement provided for the claimed invention. In particular, it is respectfully submitted that the examiner has not considered any of the factors set forth in MPEP § 2164.01(a), nor has the examiner even alleged that the specification fails to teach how to make and use the claimed invention without undue experimentation.

It is also respectfully submitted that the specification clearly enables one of ordinary skill in the art to make and use the claimed invention without undue experimentation.

For example, paragraph 25 discloses that “[t]here are preferably thermal elements for controlling the temperature of the curved member 25 to align the patterning stamp 30 with the target portion of the substrate and for correcting the magnification of the pattern on the stamp 30. The pattern is set onto the substrate 30 with the correct alignment and at the correct magnification, otherwise the substrate 20 will not be able to serve its purpose. The border of the stamp 30 and/or the substrate 20 can be constantly monitored and the thermal elements may be used either in the substrate 20 or the stamp 30 to adjust the relative positions and magnifications, even “on the fly.”

As another example, paragraph 26 discloses that “[i]n order to ensure that the pattern is correctly imprinted onto the target portion of the substrate 20, alignment markers are printed along the edges of the stamp 30, which are aligned with markers in scribe lanes along the edge of the substrate 20.”

In yet another example, paragraph 12 discloses “[t]here is preferably provided a resist provider for providing a layer of resist on the target portion of the substrate and the resist is preferably a liquid that sets when illuminated. The resist may be sprayed onto the substrate before the introduction of the stamp. There may also be a release agent sprayed onto the surface of the stamp.”

Applicant respectfully submits that in view of this disclosure, one of ordinary skill in the art would be able to make and use the claimed invention without undue experimentation from the written description and drawings as originally filed.

Accordingly, reconsideration and withdrawal of the rejection of claims 4, 6-8 and 10-13 under 35 U.S.C. §112, first paragraph, are respectfully requested.

Claims 1, 3-8, 10 and 12-15 were rejected under 35 U.S.C. §102(a) based on Hamilton (U.S. Pat. No. 6,362,804). The rejection is respectfully traversed.

Claim 1 recites a printing apparatus, comprising, inter alia, “a curved member carrying a stamp surface, said stamp surface including a pattern, wherein said curved member is configured to roll over a substrate to be printed on with said pattern.” The cited portions of Hamilton do not teach or render obvious these features.

By way of review, the cited portions of Hamilton disclose a method of making a cathode ray tube with an integral light trapping filter. The filter of Hamilton is assembled in the following manner. A face plate 104 (identified by the Examiner as the “substrate” of claim 1) is mounted on a suitable support 106. Guide pins 108 are formed on the interior concave surface of the face plate 104. A film of emulsion 110 is laid down directly on the inner wall 112 of face plate 104. A spherically curved mask 114 (identified by the Examiner as the “curved member” of claim 1) is provided with guide apertures 116 which fit accurately on guide pins 108. *See* Hamilton at col. 7, lines 10-31 and FIG. 17.

The Office Action refers to mask 114 of Hamilton as allegedly disclosing, teaching or suggesting the curved member of claim 1. Applicant strenuously disagrees. According to claim 1, the curved member of the printing apparatus is configured to roll over a substrate to be printed on with said pattern. With this said, it is clear that the mask 114 of Hamilton is **not** configured to roll over the face plate 104 (identified by the Examiner as the “substrate” of claim 1) to be printed on with a pattern. Quite to the contrary, the cited portions of Hamilton disclose that the mask 114 of Hamilton is secured to the guide pins and that the image of the mask is transferred (when the mask 114 is stationary) on the film of emulsion 110. Thus, in contrast to claim 1, the mask 114 of Hamilton is not configured to roll over the face plate 114 to be printed on with the pattern. Accordingly, for at least this reason, claim 1 is patentable over the cited portions of Hamilton.

Claims 3-8 and 15 are patentable over the cited portions of Hamilton at least by virtue of their dependency from claim 1 and for the additional features recited therein.

Claim 10 is patentable over the cited portions of Hamilton for at least the same reasons as provided above for claim 1 and for the features recited therein. For example, the

cited of portions of Hamilton do not teach or render obvious a printing apparatus for nanometric scale imprinting, comprising, *inter alia*, “a curved member carrying a stamp surface, said stamp surface including a pattern wherein said curved member is configured to roll over a substrate to transfer said pattern onto said substrate.”

Claims 12-14 are patentable over the cited portions of Hamilton at least by virtue of their dependency from claim 10 and for the additional features recited therein.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 3-8, 10 and 12-15 under 35 U.S.C. §102(a) based on Hamilton are respectfully requested.

Claims 2 and 11 were rejected under 35 U.S.C. §103(a) based on Hamilton in view of Chichoni (WO 99/28132). The rejection is respectfully traversed.

Claim 2 is patentable over the cited portions of Hamilton at least by virtue of its dependency from claim 1 and for the additional features recited therein. Similarly, claim 11 is patentable over the cited portions of Hamilton at least by virtue of its dependency from claim 10 and for the additional features recited therein.

The cited portions of Hamilton do not remedy the deficiencies of claims 2 and 11. The cited portions of Hamilton disclose a stamp holder 6 having a triangular cross section containing three flat stamps 5. However, the cited portions of Hamilton are silent as to “a curved member carrying a stamp surface, said stamp surface including a pattern wherein said curved member is configured to roll over a substrate to transfer said pattern onto said substrate”, as recited in claims 2 and 11. *See* Chichoni at page 1, lines 19-24 and FIGS. 2-3. As such, any proper combination of Hamilton and Chichoni cannot result, in any way, in the invention of claims 2 and 11.

Accordingly, reconsideration and withdrawal of the rejection of claims 2 and 11 under 35 U.S.C. §103(a) based on Hamilton in view of Chichoni are respectfully requested.

All rejections and objections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

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Respectfully submitted,

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